## 105.4 - Toxic Substances in Urine (powder form)

SRM 2669 are for determination of arsenic species in human urine. A unit consists of five pouches, each containing one vial of Level I Arsenic Species and one vial of Level II Arsenic Species.

Technical Contact for SRM 2669: <a href="mailto:lee.yu@nist.gov">lee.yu@nist.gov</a>

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	2669	2670a	2672a
Description	Arsenic Species in Frozen Human Urine	Toxic Elements in Urine (Freeze-Dried)	Mercury in Urine
Unit of Issue	((10) (2 each conc.))	(set (4) (2 each conc))	(set (4))
Level 1 Arsenous acid (AsIII)	1.47		
Level 1 Arsenic acid (AsV)	2.41		
Level 1 Monomethylarso nic acid (MMA)	1.87		
Level 1 Dimethylarsinic acid (DMA)	3.47		
Level 1 Arsenobetaine (AB)	12.4		
Level 1 Arsenic	22.2		
Level 1 Trimethylarsine oxide (TMAO)	(		
Level 1 Arsenocholine (AC)	(		
Level II Arsenous acid (AsIII)	5.03		
Level II Arsenic acid (AsV)	6.16		
Level II Monomethylarso nic acid (MMA)	7.18		
Level II Dimethylarsinic acid (DMA)	25.3		
Level II Trimethylarsine oxide (TMAO)	1.94		
Level II Arsenobetaine (AB)	1.43		

SRM	2669	2670a	2672a
Description	Arsenic Species in Frozen Human Urine	Toxic Elements in Urine (Freeze-Dried)	Mercury in Urine
Unit of Issue	((10) (2 each conc.))	(set (4) (2 each conc))	(set (4))
Level II Arsenocholine (AC)	3.74		
Level II Arsenic	50.7		
Low Level Quantity Aluminum		(4)	
Low Level Quantity Antimony		0.971	
Low Level Quantity Arsenic		(3)	
Low Level Quantity Barium		(2)	
Low Level Quantity Cadmium		0.0591	
Low Level Quantity Calcium		(29)	
Low Level Quantity Cesium		1.075	

a Flourine concentrations, as measured, are for Fluoride, mass concentration.

Values in parentheses are not certified and are given for information only.

b Iodine concentrations, as measured, are for Iodide.

<sup>&</sup>lt;sup>c</sup> These levels are not spiked, but are endogenous to the matrix.

<sup>\*</sup>Value is in mg/L.

## 105.4 - Toxic Substances in Urine (powder form)

SRM 2669 are for determination of arsenic species in human urine. A unit consists of five pouches, each containing one vial of Level I Arsenic Species and one vial of Level II Arsenic Species.

Technical Contact for SRM 2669: <a href="mailto:lee.yu@nist.gov">lee.yu@nist.gov</a>

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

Low Level Quantity Chromium	(2)
Low Level Quantity Cobalt	0.166
Low Level Quantity Copper	(5)
Low Level Quantity Iodine <sup>b</sup>	88.2
Low Level Quantity Lead	0.49
Low Level Quantity Manganese	(2.6)

SRM	2669	2670a	2672a
Description	Arsenic Species in Frozen Human Urine	Toxic Elements in Urine (Freeze-Dried)	Mercury in Urine
Unit of Issue	((10) (2 each conc.))	(set (4) (2 each conc))	(set (4))
Low Level Quantity Magnesium		(21.0)	
<b>Low Level Quantity Mercury</b>		0.0663	
Low Level Quantity Molybdenum		(17)	
Low Level Quantity Nickel		(2)	
Low Level Quantity Potassium		(410)	
Low Level Quantity Selenium		8	
Low Level Quantity Sodium		(856)	
Low Level Quantity Thallium		0.0162	
Low Level Quantity Thorium		0.0053	
Low Level Quantity Tin		(	
Low Level Quantity Tungsten		(	
Low Level Quantity Uranium		0.1020	
Low Level Quantity Vanadium		(	
Low Level Quantity Zinc		(130)	
High Level Quantity Aluminum		(100)	

SRM	2669	2670a	2672a
Description	Arsenic Species in Frozen Human Urine	Toxic Elements in Urine (Freeze-Dried)	Mercury in Urine
Unit of Issue	((10) (2 each conc.))	(set (4) (2 each conc))	(set (4))
High Level Quantity Antimony		0.824	
High Level Quantity Arsenic		(220)	

a Flourine concentrations, as measured, are for Fluoride, mass concentration.

Values in parentheses are not certified and are given for information only.

b Iodine concentrations, as measured, are for Iodide.

<sup>&</sup>lt;sup>c</sup> These levels are not spiked, but are endogenous to the matrix.

<sup>\*</sup>Value is in mg/L.

## 105.4 - Toxic Substances in Urine (powder form)

SRM 2669 are for determination of arsenic species in human urine. A unit consists of five pouches, each containing one vial of Level I Arsenic Species and one vial of Level II Arsenic Species.

Technical Contact for SRM 2669: <a href="mailto:lee.yu@nist.gov">lee.yu@nist.gov</a>

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

High Level Quantity Barium	(2)
High Level Quantity Beryllium	(5)
High Level Quantity Cadmium	4.862
High Level Quantity Calcium	(30)
High Level Quantity Cesium	1.085
High Level Quantity Chromium	(20)
High Level Quantity Cobalt	51.2
High Level Quantity Copper	(110)
High Level Quantity Iodine b	88.2
High Level Quantity Lead	233.2
High Level Quantity Magnesium	(21.2)
High Level Quantity Manganese	99
High Level Quantity Mercury	95.1

SRM Description Unit of Issue	2669 Arsenic Species in Frozen Human Urine ((10) (2 each conc.))	2670a Toxic Elements in Urine (Freeze-Dried) (set (4) (2 each conc))	2672a Mercury in Urine (set (4))				
				High Level Quantity Molybdenum		114.1	
				High Level Quantity Nickel		(100)	
High Level Quantity Platinum		51.5					
High Level Quantity Potassium		(415)					
High Level Quantity Selenium		229.5					
High Level Quantity Sodium		(942)					
High Level Quantity Thallium		5.417					
High Level Quantity Thorium		0.01606					
High Level Quantity Tin		(89)					
High Level Quantity Tungsten		(					
High Level Quantity Uranium		4.997					
High Level Quantity Vanadium		(30)					
High Level Quantity Zinc		410					
Low Level Elevated Level Mercury			0.105				

Values in parentheses are not certified and are given for information only.

a Flourine concentrations, as measured, are for Fluoride, mass concentration.

b Iodine concentrations, as measured, are for Iodide.

<sup>&</sup>lt;sup>c</sup> These levels are not spiked, but are endogenous to the matrix.

<sup>\*</sup>Value is in mg/L.